November - Lesson Plan Grades 2-3

FOCUS ON FRUITS



Begin each nutrition education lesson with a short physical activity break from the card set provided by IDPH. Have fun and get active with your students!

Objectives

Learn the special characteristics of cranberries and pears.

Learn that cranberries and pears are colorful and easy to eat as snacks.

Learn that sugar is provided naturally in fruits.

Compare and contrast ingredients on fruit labels.

Supplies Needed

November
Pick a **better** snack[™] & **Act**bingo card

Orange

Knife

Orange Food Coloring

2 Glasses

Sugar

"Label Looks" worksheet

Tasting Opportunities

Featured Fruits: Cranberries (Optional) Pears (Optional)

Background

Cranberries: Cranberry plants have drooping, pink flowers, and small, sour, seedy fruit. The small, or European, cranberry grows wild in marshlands of temperate and colder regions of Europe and North America. The large, or American, cranberry is cultivated in the northeastern United States in sand-covered bogs that can be flooded or drained at will. Flooding protects the vines from frosts and freezing weather and destroys insect pests. Most of the cranberry crop produced in the United States each year is canned as sauce or jelly or bottled as juice.

Why do cranberries remain tart, even after they ripen, unlike other fruits? The difference is that as most fruit ripens in the wild, it relies on animals to disperse the seeds. The fruit has to tempt animals – and to taste good, it has to be sweet. Cranberries, however, don't need animals to spread their seeds. They grow naturally along the banks of streams, where ripe berries can simply plop into the water and float off to a new location.

Pears: Pears are a pome fruit relative of the apple. Pears rank second to the apple as the most popular fruit grown in the United States. They can be eaten and used in a lot of the same ways as the apple. One distinct feature of the pear besides the shape is the soft texture. This soft texture is the result of the starch converting to sugar after being picked from a tree to ripen. There are more than 3,000 known varieties of pears in the world. U.S. production comes from states in the Northwest, plus New York, Pennsylvania, Michigan, and California. Imports come from South America, Canada, New Zealand, and South Africa. Varieties of pears include Anjou, Bartlett, Bose, Comice, Forelle, and Seckel. Pears have a sweet, rich flavor and come in a variety of colors including green, golden yellow and red. Among varieties there are only subtle differences in flavor and texture.

Web Site Resources

www.idph.state.ia.us/pickabettersnack www.fruitsandveggiesmorematters.org www.choosemyplate.gov

Do the Activity: Orange Squeeze

Demonstrate making 100% orange juice by squeezing an orange into a glass. In another glass, mix water, sugar and orange food coloring making an orange drink. Compare eating an orange (juice plus section membranes), drinking the squeezed juice, and drinking soda pop or fruit flavored drinks.

Strain the juice and show students what pulp is. Note that sugar does not need to be added to orange juice to make it sweet.

On an overhead, compare labels from flavored orange drink and 100% orange juice using "Label Looks" worksheet. Ask "What is different? What is the same?"

Differences – Juice has more nutrients, like potassium and vitamin A, than fruit flavored drinks. Corn syrup is added to fruit flavored drinks.

Label Looks

Similarities - Vitamin C is added to the juice drink but occurs naturally in 100% orange juice. Calories are similar. There is no fat in either drink.

Explain the following: In order to be counted as fruit, juice needs to be 100% fruit juice. Some beverages contain small amounts of juice. It is important to look at the label. The label will tell you how much juice the beverage contains. Some beverages may be fruit flavored, but not contain any juice at all.

Ask "What ingredient is added to fruit flavored drinks to make them taste sweet? Sugar from corn called corn syrup.

A small amount of orange juice and orange drink could be placed in two small paper cups for each child to compare the tastes.

If children drink 100% juice, it counts on their bingo card.

Talk It Over:

Ask the students which they like best: orange sections, orange juice or orange drink. Why?





Cranberries, because of their tartness, are often used in juice mixtures or blends. How many of you have ever had juice that contained cranberry juice? What are some combinations of juices that you have either seen in the grocery store or have tried? Cranberry grape juice, cranberry apple juice, cranberry peach juice, cranberry raspberry juice, cranberry and mixed berry juice are a few. If you have a label from a cranberry juice product, point out if it is 100% juice.

How many have tried dried cranberries? They are sweet because sugar has been added.

Hand out one fresh cranberry per student. Describe the shape, smell, color. Do you have cranberries at your Thanksgiving dinner? How are they prepared? Have they tasted canned cranberry sauce?

Pears are another fruit featured on our bingo card this month. Pear juice is often used in canned fruits packed in 100% fruit juice. If you have a label from a canned fruit product packed in 100% juice (other than pineapple), check the label to see if the juice the fruit is packed in is pear juice.

Apply:



Tasting Opportunity

Pick a **better** snack[™] reminds you that it is easy to eat fruits as snacks.

Cut up a pear for the students to sample. Sample a fresh cranberry and compare to a dried cranberry. Note the dramatic differences between the two tastes. They can then put an "X" through the bingo square of the fruit that they sampled.

How would you get a pear ready to eat as a snack? Pear – Wash. Eat. (How easy is that?)

How would you get dried cranberries or cranberry juice blends ready for a snack?

Cranberries – Open. Eat. (How easy is that?)
Juice – Pour. Drink. (How easy is that?)

On the back of the Pick a **better** snackTM & **Act** bingo card there is information for parents and grandparents. Take the bingo card home and discuss the information with them.





Extend the Activity



Art, Music & PE

Teacher slices an apple or pear in half and discusses the lines of symmetry seen inside. Students can create pictures using lines of symmetry as well.



Language Arts & Reading

Have fun with homophones! Challenge students to create sentences using pear, pair and pare correctly.



Math

Adapt the previous suggestion from art to discuss congruent figures.

fruits weigh is water weight?

Using a scale, compare the weight of a fresh fruit to it's dried counterpart. Discuss the weight difference. How much of what

Refer to the Orange Squeeze activity at the beginning of the lesson. Create a frequency table of student preferences for orange juice, orange drink and orange sections.



Science & Health

Learn more about the origin of fruits such as the pear in a humorous story titled <u>Apples to Oregon: Being the (Slightly)</u> True Narrative of How a Brave Pioneer Father Brought Apples, <u>Peaches, Pears, Plums and Grapes</u> by Deborah Hopkinson, Atheneum Books for Young Readers, 2004. A pioneer father transports his beloved fruit trees and his family to Oregon in the mid-nineteenth century.



Social Studies

Explore Native American Folktales through one of the traditional stories about the Ojibwe trickster and teacher, Nanabosho. The book is titled Nanabosho and the Cranberries by Joe & Matrine McLellan. Through this story your students will also gain a better understanding of how cranberries are harvested.





Label Looks

Orange Drink With 10% Juice

Nutrition Facts Serving Size 1 Cup Amount Per Serving Calories 126 Calories From Fat 0 % Daily Value* Total Fat 0g 0% Trans Fat 0g 2% Sodium 39.7mg 0% Potassium 0mg Total Carbohydrate 29g 11% Sugars 31.8g Protein 0g Vitamin C 100%

Ingredients:

Water; High Fructose Corn Syrup; Apple Juice; Orange Juice; Other Flavors and

Preservatives

100% Orange Juice

Nutrition Facts Serving Size 1 Cup		
Amount Per Serving Calories 120	Calories From Fat 0	
	% Daily Value*	
Total Fat 0g	0%	
Trans Fat 0g		
Sodium 0mg	0%	
Potassium 420mg	12%	
Total Carbohydrate 29g	10%	
Sugars 28g		
Protein 1g		
Vitamin A 10% Vitamin C 100% Folate 10% Magnesium 4%	Thiamin 10% Phosphorus 2% Copper 2%	

Ingredients:

Water; Orange Juice

What is the same?	What is different?



